# Manuals

1.

Download OTTM\_AD\_20230320.zip , OTTM\_LP\_2023 0320.zip from OTTM Download page and unzip them into the same folder

| Home | Download                                  | Help |               |                      |  |  |  |  |
|------|---|------|---------------|----------------------|--|--|--|--|
|      | Download the abstract data and local OTTM |      |               |                      |  |  |  |  |
|      | OTTM Download                             |      |               |                      |  |  |  |  |
|      | Dat                                       |      | Description   | File                 |  |  |  |  |
|      | 2023-0                                    | 3-20 | Abstract Data | OTTM_AD_20230320.zip |  |  |  |  |
|      | 2023-0                                    | 3-20 | Local Program | OTTM_LP_20230320.sip |  |  |  |  |
|      |   |      |               |                      |  |  |  |  |
|      |   |      |               |                      |  |  |  |  |

## The result after decompression

| ~<br>名称             | 修改日期             | 类型  | 大小 |
|---------------------|------------------|-----|----|
| elasticsearch-8.4.3 | 2022/10/28 13:16 | 文件夹 |    |
| 📙 Local OTTM        | 2023/3/21 19:13  | 文件夹 |    |

2.

Open elasticsearch-8.4.3 folder then open bin folder , run elasticsearch.bat program(It may take a few minutes, be patient).

#### software > OTTM > elasticsearch-8.4.3 > bin

|          | 名称                         | 修改日期             | 类型          | 大小 |    |
|----------|----------------------------|------------------|-------------|----|----|
| *        | elasticsearch              | 2022/10/28 13:16 | 文件          | 1  | KB |
| <u>_</u> | lasticsearch.bat           | 2022/10/28 13:16 | Windows 批处理 | 1  | KB |
| ж<br>*   | elasticsearch-certgen      | 2022/10/28 13:16 | 文件          | 1  | KB |
|          | elasticsearch-certgen.bat  | 2022/10/28 13:16 | Windows 批处理 | 1  | KB |
| *        | elasticsearch-certutil     | 2022/10/28 13:16 | 文件          | 1  | KB |
|          | elasticsearch-certutil.bat | 2022/10/28 13:16 | Windows 批处理 | 1  | KB |
|          | 📄 elasticsearch-cli        | 2022/10/28 13:16 | 文件          | 1  | KB |

## The following screen appears to indicate that startup is

#### complete

| C:\Windows\system32\cmd.exe   | -                            |                        | (      |
|---|------------------------------|------------------------|--------|
| at org.elasticsearch.server@8.4.3/org.elasticsearch.action.search.AbstractSearchAsyncAction.execut<br>tSearchAsyncAction.java:474)  | ePhase                       | e(Abstra               | ^      |
| at org.elasticsearch.server@8.4.3/org.elasticsearch.action.search.AbstractSearchAsyncAction.start(<br>AsyncAction.java:217)   | Abstra                       | actSearc               |        |
| at org.elasticsearch.serverwo.4.5/org.elasticsearch.action.search.iransportsearchaction.executesea<br>earchAction.java:1041)  |                              | ransport:              |        |
| portSearchAction. java: 769)  | arsea.                       |                        |        |
| See logs for more details.  |                              |                        |        |
| [2023-03-21T14:32:26, 787][WARN ][o.e.i.g.GeoIpDownloader ] [DESKTOP-CRS70B3] could not delete old chunks<br>base [GeoLite2-ASN.mmdb]org.elasticsearch.action.search.SearchPhaseExecutionException:   | for g                        | eoip data              | a      |
| act Search SyncAction. java: 728)<br>at org. elasticsearch server@8. 4. 3/org. elasticsearch. action. search. AbstractSearchAsyncAction. execut   | ePhase                       | e (Abstra              | c      |
| tSearchAsyncAction. java:474)<br>at org.elasticsearch.server@8.4.3/org.elasticsearch.action.search.AbstractSearchAsyncAction.start(<br>AsyncAction.java:217)  | Abstra                       | actSearcl              | n      |
| at org.elasticsearch.server@8.4.3/org.elasticsearch.action.search.TransportSearchAction.executeSea<br>earchAction.iava:1041)  | rch(T                        | ransport               | 5      |
| at org.elasticsearch.server@8.4.3/org.elasticsearch.action.search.TransportSearchAction.executeLoc<br>portSearchAction.java:769)  | alSea                        | rch(Tran               | 8      |
| See logs for more details.  |                              |                        |        |
| [2023-03-21T14:32:27,198][INFO ][o.e.c.r.a.AllocationService] [DESKTOP-CRS70B3] current.health="YELLOW" me<br>health status changed from [RED] to [YELLOW] (reason: [shards started [[abstract22][0]]])." previous.heal<br>n="shards started [[abstract22][0]]" | ssage <sup>:</sup><br>th="Rl | ="Cluster<br>ED" rease | p      |
|   |                              |                        | $\sim$ |

### 3.

Open Local OTTM folder, Put your own proteomics data files into this folder, formatted as txt, with the first column being the symbol name of the protein, see the readme folder in this folder for an example of the format.

| 名称                                   | 修改日期             | 类型              | 大小        |
|--------------------------------------|------------------|-----------------|-----------|
| mkl_vml_avx.1.dll                    | 2021/9/5 2:38    | 应用程序扩展          | 16,146 KB |
| mkl_vml_avx2.1.dll                   | 2021/9/5 2:38    | 应用程序扩展          | 15,185 KB |
| mkl_vml_avx512.1.dll                 | 2021/9/5 2:38    | 应用程序扩展          | 14,311 KB |
| mkl_vml_cmpt.1.dll                   | 2021/9/5 2:38    | 应用程序扩展          | 7,825 KB  |
| mkl_vml_def.1.dll                    | 2021/9/5 2:38    | 应用程序扩展          | 8,736 KB  |
| mkl_vml_mc.1.dll                     | 2021/9/5 2:38    | 应用程序扩展          | 15,266 KB |
| mkl_vml_mc2.1.dll                    | 2021/9/5 2:38    | 应用程序扩展          | 14,990 KB |
| mkl_vml_mc3.1.dll                    | 2021/9/5 2:38    | 应用程序扩展          | 15,012 KB |
| MSVCP140.dll                         | 2022/11/6 17:52  | 应用程序扩展          | 577 KB    |
| msvcp140_1.dll                       | 2020/9/8 18:10   | 应用程序扩展          | 31 KB     |
| msvcp140_2.dll                       | 2020/9/8 18:10   | 应用程序扩展          | 190 KB    |
| msvcp140_codecvt_ids.dll             | 2020/9/8 18:10   | 应用程序扩展          | 28 KB     |
| 🗟 omptarget.dll                      | 2021/9/24 13:04  | 应用程序扩展          | 656 KB    |
| 🗟 omptarget.rtl.level0.dll           | 2021/9/24 13:04  | 应用程序扩展          | 1,426 KB  |
| 🗟 omptarget.rtl.opencl.dll           | 2021/9/24 13:04  | 应用程序扩展          | 1,487 KB  |
| 📧 openssl.exe                        | 2022/7/11 16:39  | 应用程序            | 532 KB    |
| 🗋 openssl.pdb                        | 2022/7/11 16:39  | PDB 文件          | 2,476 KB  |
| 🚰 Protein_Driven_Drug_Targeting.exe  | 2023/3/21 19:01  | 应用程序            | 11,926 KB |
| 📄 pyexpat.pyd                        | 2022/11/6 17:52  | Python Extensio | 185 KB    |
| python3.dll                          | 2022/11/6 17:52  | 应用程序扩展          | 53 KB     |
| python310.dll                        | 2022/11/6 17:52  | 应用程序扩展          | 4,633 KB  |
| pythoncom310.dll                     | 2022/11/6 17:52  | 应用程序扩展          | 526 KB    |
| pywintypes310.dll                    | 2022/11/6 17:52  | 应用程序扩展          | 130 KB    |
| 📄 select.pyd                         | 2022/11/6 17:52  | Python Extensio | 18 KB     |
| 🗟 sqlite3.dll                        | 2022/11/6 17:52  | 应用程序扩展          | 1,422 KB  |
| 📧 sqlite3.exe                        | 2022/9/28 8:52   | 应用程序            | 1,776 KB  |
| 🗟 tcl86t.dll                         | 2022/11/6 17:52  | 应用程序扩展          | 1,672 KB  |
| <pre>/ tclsh.exe</pre>               | 2022/6/1 6:38    | 应用程序            | 69 KB     |
| <pre>tclsh86.exe</pre>               | 2022/6/1 6:38    | 应用程序            | 69 KB     |
| 🖊 tclsh86t.exe                       | 2022/6/1 6:38    | 应用程序            | 69 KB     |
| 🗟 tk86t.dll                          | 2022/11/6 17:52  | 应用程序扩展          | 1,453 KB  |
| 🗟 ucrtbase.dll                       | 2022/11/6 17:52  | 应用程序扩展          | 993 KB    |
| 🛃 unicodedata.pyd                    | 2022/11/6 17:52  | Python Extensio | 1,084 KB  |
| 💷 unxz.exe                           | 2022/9/27 21:59  | 应用程序            | 20 KB     |
| User protein list.txt                | 2022/10/31 17:16 | 文本文档            | 21 KB     |
| li≥ vccorlib140.dll                  | 2020/9/8 18:10   | 应用程序扩展          | 330 KB    |
| 🖻 vcomp140.dll                       | 2020/9/8 18:10   | 应用程序扩展          | 181 KB    |
| VCRUNTIME140.dll                     | 2022/11/6 17:52  | 应用程序扩展          | 100 KB    |
| VCRUNTIME140_1.dll                   | 2022/11/6 17:52  | 应用程序扩展          | 44 KB     |
| 🥳 win32api.cp310-win_amd64.pyd       | 2022/11/6 17:52  | Python Extensio | 124 KB    |
| 🥃 win32clipboard.cp310-win_amd64.pyd | 2022/11/6 17:52  | Python Extensio | 24 KB     |
| 🛃 win32evtlog.cp310-win_amd64.pyd    | 2022/11/6 17:52  | Python Extensio | 71 KB     |
| 🛃 win32pdh.cp310-win_amd64.pyd       | 2022/11/6 17:52  | Python Extensio | 31 KB     |
| 🛃 win32security.cp310-win_amd64.pyd  | 2022/11/6 17:52  | Python Extensio | 132 KB    |
| 🍺 win32trace.cp310-win_amd64.pyd     | 2022/11/6 17:52  | Python Extensio | 20 KB     |
|                                      |                  |                 |           |

Double-click to open the exe program to run, wait for the end of the run and press any key to exit, the results are output in the output folder.

| <b>夕</b> む ^                        | 修改口切              | 米田  | +45       |
|-------------------------------------|-------------------|---|-----------|
|                                     |                   | <u>天</u> 里  |           |
| Mkl_vml_avx.1.dll                   | 2021/9/5 2:38     | 应用程序扩展<br>1000-000-000-000-000-000-000-000-000-00 | 16,146 KB |
| Mkl_vml_avx2.1.dll                  | 2021/9/5 2:38     | 应用程序扩展  | 15,185 KB |
| Mkl_vml_avx512.1.dll                | 2021/9/5 2:38     | 应用程序扩展  | 14,311 KB |
| Mkl_vml_cmpt.1.dll                  | 2021/9/5 2:38     | 应用程序扩展  | 7,825 KB  |
| Million mkl_vml_def.1.dll           | 2021/9/5 2:38     | 应用程序扩展  | 8,736 KB  |
| Mkl_vml_mc.1.dll                    | 2021/9/5 2:38     | 应用程序扩展  | 15,266 KB |
| Mkl_vml_mc2.1.dll                   | 2021/9/5 2:38     | 应用程序扩展  | 14,990 KB |
| Mkl_vml_mc3.1.dll                   | 2021/9/5 2:38     | 应用程序扩展  | 15,012 KB |
| MSVCP140.dll                        | 2022/11/6 17:52   | 应用程序扩展  | 577 KB    |
| msvcp140_1.dll                      | 2020/9/8 18:10    | 应用程序扩展  | 31 KB     |
| msvcp140_2.dll                      | 2020/9/8 18:10    | 应用程序扩展  | 190 KB    |
| msvcp140_codecvt_ids.dll            | 2020/9/8 18:10    | 应用程序扩展  | 28 KB     |
| 🗟 omptarget.dll                     | 2021/9/24 13:04   | 应用程序扩展  | 656 KB    |
| 🔄 omptarget.rtl.level0.dll          | 2021/9/24 13:04   | 应用程序扩展  | 1,426 KB  |
| 🗟 omptarget.rtl.opencl.dll          | 2021/9/24 13:04   | 应用程序扩展  | 1,487 KB  |
| openssl.exe                         | 2022/7/11 16:39   | 应用程序  | 532 KB    |
| openssl.pdb                         | 2022/7/11 16:39   | PDB文件   | 2,476 KB  |
| Protein_Driven_Drug_Targeting.exe   | 2023/3/21 19:01   | 应用程序  | 11,926 KB |
| 🌛 pyexpat.pyd                       | 2022/11/6 17:52   | Python Extensio                                   | 185 KB    |
| 🔄 python3.dll                       | 2022/11/6 17:52   | 应用程序扩展  | 53 KB     |
| 🗟 python310.dll                     | 2022/11/6 17:52   | 应用程序扩展  | 4,633 KB  |
| pythoncom310.dll                    | 2022/11/6 17:52   | 应用程序扩展  | 526 KB    |
| pywintypes310.dll                   | 2022/11/6 17:52   | 应用程序扩展  | 130 KB    |
| 📄 select.pyd                        | 2022/11/6 17:52   | Python Extensio                                   | 18 KB     |
| 🗟 sqlite3.dll                       | 2022/11/6 17:52   | 应用程序扩展  | 1,422 KB  |
| sqlite3.exe                         | 2022/9/28 8:52    | 应用程序  | 1,776 KB  |
| 🗟 tcl86t.dll                        | 2022/11/6 17:52   | 应用程序扩展  | 1,672 KB  |
| 🖊 tclsh.exe                         | 2022/6/1 6:38     | 应用程序  | 69 KB     |
| 🖊 tclsh86.exe                       | 2022/6/1 6:38     | 应用程序  | 69 KB     |
| 🖊 tclsh86t.exe                      | 2022/6/1 6:38     | 应用程序  | 69 KB     |
| 🗟 tk86t.dll                         | 2022/11/6 17:52   | 应用程序扩展  | 1,453 KB  |
| 🗟 ucrtbase.dll                      | 2022/11/6 17:52   | 应用程序扩展  | 993 KB    |
| 📄 unicodedata.pyd                   | 2022/11/6 17:52   | Python Extensio                                   | 1,084 KB  |
| 📧 unxz.exe                          | 2022/9/27 21:59   | 应用程序  | 20 KB     |
| 📄 User protein list.txt             | 2022/10/31 17:16  | 文本文档  | 21 KB     |
| 🗟 vccorlib140.dll                   | 2020/9/8 18:10    | 应用程序扩展  | 330 KB    |
| 🗟 vcomp140.dll                      | 2020/9/8 18:10    | 应用程序扩展  | 181 KB    |
| VCRUNTIME140.dll                    | 2022/11/6 17:52   | 应用程序扩展  | 100 KB    |
| VCRUNTIME140_1.dll                  | 2022/11/6 17:52   | 应用程序扩展  | 44 KB     |
| 🝺 win32api.cp310-win_amd64.pyd      | 2022/11/6 17:52   | Python Extensio                                   | 124 KB    |
| 🗟 win32clipboard.cp310-win_amd64.py | d 2022/11/6 17:52 | Python Extensio                                   | 24 KB     |
| 澷 win32evtlog.cp310-win_amd64.pyd   | 2022/11/6 17:52   | Python Extensio                                   | 71 KB     |
| 🝺 win32pdh.cp310-win_amd64.pyd      | 2022/11/6 17:52   | Python Extensio                                   | 31 KB     |
| 🗟 win32security.cp310-win_amd64.pyd | 2022/11/6 17:52   | Python Extensio                                   | 132 KB    |
| 🗟 win32trace.cp310-win_amd64.pyd    | 2022/11/6 17:52   | Python Extensio                                   | 20 KB     |

| E:\software\OTTM\Local OTTM\Protein_Driven_Drug_Targeting.exe   | - | × |
|---|---|---|
| Welcome to use the new tool OTTM  |   | ^ |
| Please make sure to correctly fill in the configuration file<br>The number of proteins in the file is: 1513<br>The number of PPI proteins list is: 1830<br>The number of recommend targets is: 27<br>The number of recommend PPI targets is: 14<br>The program is finished! |   |   |
| Please enter any key to exit  |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   |   |
|   |   | ~ |

## Open the output folder to view the results

| 名 | か<br>か                            | 修改日期            | 类型              | 大小     |  |
|---|-----------------------------------|-----------------|-----------------|--------|--|
|   | aiohttp                           | 2023/3/21 19:05 | 文件夹             |        |  |
|   | brotli                            | 2023/3/21 19:05 | 文件夹             |        |  |
|   | certifi                           | 2023/3/21 19:05 | 文件夹             |        |  |
|   | cryptography                      | 2023/3/21 19:05 | 文件夹             |        |  |
|   | cryptography-38.0.1.dist-info     | 2023/3/21 19:05 | 文件夹             |        |  |
|   | data                              | 2023/3/21 19:05 | 文件夹             |        |  |
|   | frozenlist                        | 2023/3/21 19:05 | 文件夹             |        |  |
|   | IPython                           | 2023/3/21 19:05 | 文件夹             |        |  |
|   | jedi                              | 2023/3/21 19:05 | 文件夹             |        |  |
|   | lib2to3                           | 2023/3/21 19:05 | 文件夹             |        |  |
|   | lxml                              | 2023/3/21 19:05 | 文件夹             |        |  |
|   | markupsafe                        | 2023/3/21 19:05 | 文件夹             |        |  |
|   | mkl                               | 2023/3/21 19:05 | 文件夹             |        |  |
|   | multidict                         | 2023/3/21 19:05 | 文件夹             |        |  |
|   | numexpr                           | 2023/3/21 19:05 | 文件夹             |        |  |
| 1 | numpy                             | 2023/3/21 19:05 | 文件夹             |        |  |
| 1 | output                            | 2023/3/21 19:05 | 文件夹             |        |  |
| ļ | pandas                            | 2023/3/21 19:05 | 文件夹             |        |  |
|   | parso                             | 2023/3/21 19:05 | 文件夹             |        |  |
|   | prettytable-3.5.0.dist-info       | 2023/3/21 19:05 | 文件夹             |        |  |
|   | psutil                            | 2023/3/21 19:05 | 文件夹             |        |  |
|   | pyecharts                         | 2023/3/21 19:05 | 文件夹             |        |  |
|   | pytz                              | 2023/3/21 19:05 | 文件夹             |        |  |
|   | Readme                            | 2023/3/21 19:12 | 文件夹             |        |  |
|   | setuptools-63.4.1-py3.10.egg-info | 2023/3/21 19:05 | 文件夹             |        |  |
|   | simplejson                        | 2023/3/21 19:05 | 文件夹             |        |  |
|   | tcl                               | 2023/3/21 19:05 | 文件夹             |        |  |
|   | tcl8                              | 2023/3/21 19:05 | 文件夹             |        |  |
|   | Template                          | 2023/3/21 19:05 | 文件夹             |        |  |
|   | tk                                | 2023/3/21 19:05 | 文件夹             |        |  |
|   | tornado                           | 2023/3/21 19:05 | 文件夹             |        |  |
|   | wheel-0.37.1-py3.9.egg-info       | 2023/3/21 19:05 | 文件夹             |        |  |
|   | win32com                          | 2023/3/21 19:05 | 文件夹             |        |  |
|   | yarl                              | 2023/3/21 19:05 | 文件夹             |        |  |
|   | zmq                               | 2023/3/21 19:05 | 文件夹             |        |  |
| 2 | asyncio.pyd                       | 2022/11/6 17:52 | Python Extensio | 54 KB  |  |
| 2 | bz2.pyd                           | 2022/11/6 17:52 | Python Extensio | 23 KB  |  |
| 2 | _cffi_backend.cp310-win_amd64.pyd | 2022/11/6 17:52 | Python Extensio | 160 KB |  |
| 2 | _ctypes.pyd                       | 2022/11/6 17:52 | Python Extensio | 114 KB |  |
| 2 | _decimal.pyd                      | 2022/11/6 17:52 | Python Extensio | 250 KB |  |
| 2 | elementtree.pyd                   | 2022/11/6 17:52 | Python Extensio | 125 KB |  |
| 2 | hashlib.pyd                       | 2022/11/6 17:52 | Python Extensio | 48 KB  |  |
| 2 | Izma.pyd                          | 2022/11/6 17:52 | Python Extensio | 35 KB  |  |
| 2 | _msi.pyd                          | 2022/11/6 17:52 | Python Extensio | 32 KB  |  |
| 2 | multiprocessing.pyd               | 2022/11/6 17:52 | Python Extensio | 22 KB  |  |

6.

Generate folders with different names depending on the input parameter (reported number) in the config.

| 名称   | 修改日期            | 类型  | 大小 |
|--|-----------------|-----|----|
| Hepatocellular carcinoma reported_number_0 | 2023/3/21 19:05 | 文件夹 |    |

## 7.

Further results are divided into a list of proteins directly derived from user input and a list of PPI proteins obtained through protein interactions

| sof | software > OTTM > Local OTTM > output > Hepatocellular carcinoma reported_number_0 > |                 |     |    |  |  |  |  |
|-----|--|-----------------|-----|----|--|--|--|--|
|     | へ<br>名称  | 修改日期            | 类型  | 大小 |  |  |  |  |
|     | 📙 PPI_Target   | 2023/3/21 19:05 | 文件夹 |    |  |  |  |  |
| *   | 📙 Target   | 2023/3/21 19:05 | 文件夹 |    |  |  |  |  |

### 8.

The name of each folder is the name of the recommended target, and the folder contains information about the drug corresponding to that target and the drug's hotness. The last three html files show the full target classification information and number, as well as the final recommended targets and corresponding drugs by the tool.

| 名称 |                       | 修改日期            | 类型             | 大小    |
|----|-----------------------|-----------------|----------------|-------|
|    | ARSB                  | 2023/3/21 19:05 | 文件夹            |       |
|    | BPI                   | 2023/3/21 19:05 | 文件夹            |       |
|    | BRD2                  | 2023/3/21 19:05 | 文件夹            |       |
|    | CAMP                  | 2023/3/21 19:05 | 文件夹            |       |
|    | CRTC1                 | 2023/3/21 19:05 | 文件夹            |       |
| 1  | CTSA                  | 2023/3/21 19:05 | 文件夹            |       |
|    | CTSG                  | 2023/3/21 19:05 | 文件夹            |       |
|    | ELANE                 | 2023/3/21 19:05 | 文件夹            |       |
|    | FCER1G                | 2023/3/21 19:05 | 文件夹            |       |
|    | FPR1                  | 2023/3/21 19:05 | 文件夹            |       |
|    | GLA                   | 2023/3/21 19:05 | 文件夹            |       |
|    | ITGB2                 | 2023/3/21 19:05 | 文件夹            |       |
|    | LTF                   | 2023/3/21 19:05 | 文件夹            |       |
|    | M6PR                  | 2023/3/21 19:05 | 文件夹            |       |
|    | MRM2                  | 2023/3/21 19:05 | 文件夹            |       |
|    | PDCD2                 | 2023/3/21 19:05 | 文件夹            |       |
|    | PPAT                  | 2023/3/21 19:05 | 文件夹            |       |
|    | PRTN3                 | 2023/3/21 19:05 | 文件夹            |       |
|    | PSEN2                 | 2023/3/21 19:05 | 文件夹            |       |
|    | RRM1                  | 2023/3/21 19:05 | 文件夹            |       |
|    | RXRB                  | 2023/3/21 19:05 | 文件夹            |       |
|    | S100A12               | 2023/3/21 19:05 | 文件夹            |       |
|    | SLC2A4                | 2023/3/21 19:05 | 文件夹            |       |
|    | SMN1                  | 2023/3/21 19:05 | 文件夹            |       |
|    | TFPI                  | 2023/3/21 19:05 | 文件夹            |       |
|    | TK1                   | 2023/3/21 19:05 | 文件夹            |       |
|    | TNC                   | 2023/3/21 19:05 | 文件夹            |       |
| G  | ALL_Targets.html      | 2023/3/21 19:15 | Microsoft Edge | 24 KB |
| G  | classify_targets.html | 2023/3/21 19:15 | Microsoft Edge | 3 KB  |
| G  | drug_suggestion.html  | 2023/3/21 19:16 | Microsoft Edge | 23 KB |